

MODIS Fire Algorithm (MOD14) Readiness

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MOD14 C4 Changes (1/3)

- Implemented V4 algorithm
 - Detects smaller fires
 - Global false alarm rate reduced by factor of 10 to 100
 - “Unknown” output class arises much less frequently
 - No longer use scan angle cut off

MOD14 C4 Changes (2/3)

- Implemented internal HDF compression
 - L2 output files ~ 5% uncompressed size
 - Reduce storage requirements at SCF (and DAAC)
 - Reduce network burden on users since ECS/EDG cannot support compressed MODIS product files

MOD14 C4 Changes (3/3)

- Added CMG-related information to L2 product
 - Reduces input data volume for CMG production by factor of 150!
 - 51 GB/yr vs. 7.5 TB/yr

MOD14 C4 Remaining Known Issues

- Poor quality of land/sea mask in some areas
 - Can sometimes induce false alarms in nearby land pixels

MOD14 C4 Future Changes

- Collection 4, Level 2
 - None expected
 - Code and algorithm tested with nearly 20,000 granules of input data
- Collection 4, Levels 2G and 3
 - Perhaps add thermal channel data
- Collection 5, Level 2
 - Update fire radiative power retrieval